IOWA DEPARTMENT OF TRANSPORTATION

To Office Bridges and Structures Date April 1, 2009

Attention All Employees Ref No. 521.1

From Gary Novey

Office Bridges and Structures

Subject: Method's Memo No. 113 (Use of anchor bolt wells)

Requests are sometimes received from contractors to use anchor bolt wells in lieu of preset or drilled in anchors. Requests for anchor bolt wells have been approved in the past and typically are:

1. Stay-in-place anchor bolt wells

The Office's preference is to use stay-in-place anchor bolt wells, and is typically formed with corrugated galvanized metal duct material.

2. Removable anchor bolt wells.

The removable anchor bolt well has been approved by the Office but is not preferred. This method consists of a greased PVC sleeve that is removed following the casting of the concrete cap. Care must be taken by the contractor to thoroughly clean and roughen the void following the removal of the greased PVC sleeve.

Office policy will be to continue to specify drilled in or preset anchor bolt wells in the plans. Should the contractor request anchor bolt wells those will be considered on a case-by-case basis. When anchor bolt wells are used one fixed pier shall remain preset or drilled. Some situations where the Bridge Office has allowed the use of anchor bolt wells include:

- 1. Bridges with wide bottom flanges that did not permit drilling at anchor bolt locations.
- 2. Bridges with a high and varying skew combined with flared girders making it difficult to avoid the longitudinal reinforcing in the pier cap.

Submittals by the contractor for approval of anchor bolt wells shall include:

- 1. Stay-in-place-duct size, and material specification.
- 2. Grouting procedure (typical a grout tube is inserted in the bottom of the well and the grout is pumped in).
- 3. Grout material specification.
- 4. A diagram showing how the pier cap reinforcing will be shifted to accommodate the anchor bolt wells.